

Dam Repair Items #6 - #7 - Scope of Work

Item #6 – EXPANSION/CONSTRUCTION JOINT CRACKS

- Remove vegetation and seal the cracks of secondary spillway; **Scope of work:** Using high pressure compressed air, blow out vegetation/dirt in the secondary spillway concrete expansion joints. Install a commercial grade epoxy self levelling expansion joint filler into the joints. Akonaflex Pro model #1894180; Menards SKU #1894180 or approved equal meeting ASTM C719 & D412. Base bid is to seal 250 ft. of expansion joint. Provide a unit price to clean/seal expansion joints per 100 ft. of joint.
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Item #7 Surface Cracks

Grind all concrete surface cracks to a depth of ½" D. X ¼" wide and blow out debris using compressed air. Fill all prepared surface cracks with Akona gray pourable concrete crack filler model #5581352; Menards SKU # 5581352 (comes in one gallon pourable containers).

Contractor is to clean all concrete expansion joints in the secondary spillway. Contractor to install caulk in expansion joint cracks as directed by Village representative.

Item #7 - End Sill

Repair deteriorated concrete in secondary spillway end sill, left end just above end sill vertical wall;

- **Scope of Work:** Grind all surface cracks along end sill to a depth of ½" deep X ¼" wide and blow out with compressed air to clean. Fill cracks with Akona model #5581352 or equal epoxy pourable concrete crack filler full length.
- Remove concrete from void to square off the sides and bottom at the left end of sill (near exit from 30" reservoir drain). Drill ½" holes to a depth of 6" in section of existing concrete. Install 12" lengths of ½" reinforcing rod into holes. Form edge of end sill in area of missing concrete. Form and fill void with concrete. Apply two coats of a solvent based concrete sealer to all new concrete poured.



Village of Roaming Shores

2500 Hayford Road

P.O. Box 237

Roaming Shores, Ohio 44084

440-563-5083, Administrator: 440-805-9018, Fax: 440-563-5912

1. For bidding purposes, the following surface crack lengths were estimated. Bids are to utilize these estimated crack lengths for surface cracks in secondary spillway slab:

130' in raised coffer at water's edge.

100' in first section after coffer.

70' in 2nd section that is 23' in length.

40' in all 15' saw cut expansion sections.

250' of surface cracks in sill.

Grand total surface cracks = **600 ft.** for bidding purposes

2. Contractors to bid alternate to sawcut through secondary spillway slab 3' from edge and remove concrete. Demo/remove knee wall at end of spillway slab down to one foot below top of sill concrete slab. Assume 20 tons of flowable fill needed for filling voids below spillway slab. Form and monolithic pour of 6" concrete 3500 psi to replace slab and 9" thick knee-wall. Re-bar in wall per detail W – W sheet #11. Horizontal re-bar at 2' spacing in wall. Drill into edge of slab 12" , epoxy in #4 re-bar attached to re-bar mat in the slab. Apply Bentonite expanding seal onto edge of existing slab edge to act as a seal. All new concrete to receive two coats of solvent based sealer.
3. Contractors must be present at the pre-bid meeting on Aug. 14th @ 10:00am

Carl Reinke

Carl Reinke, Village Administrator & Zoning Officer

North Side

LONGITUDINAL JOINTS

El. 828.75

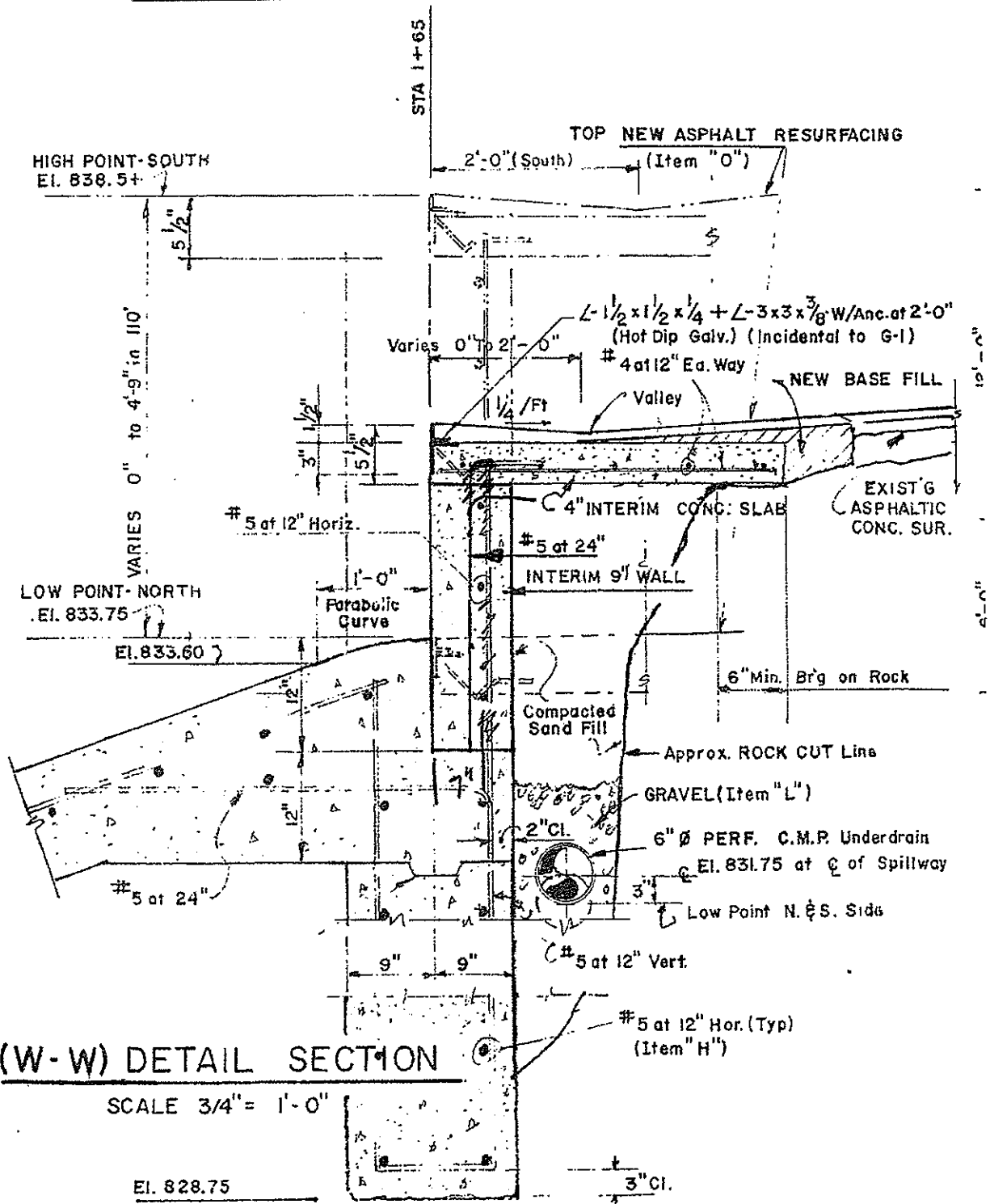
BOT. CUT-OFF WALL

(Looking Upstream)

SECTIONAL ELEVATION of
of SPILLWAY SLAB MATCH

SCALE 3/32" = 1'-0"

EXISTING SPILLWAY - END SILL



ITEM 8

N

EDGE OF CONCRETE SPILLWAY

6" CMP UNDERDRAIN
HIGH PT. IN MIDDLE.
DRAINS N & S.

DEM'D EXISTING 9" WALL
TO 1' BELOW TOP OF

SILL SCAB.
FORM AND POUR NEW CONCRETE
3500 PSI @ 6" SLUMP PER
SECTION W-W SH. 11. WALL & SCAB TO BE A
MONOLITHIC POUR.
SILL SCAB

SECONDARY SPILLWAY SCAB

113'

INTERIM WALL 9"
REINFORCING PER
DETAIL W-W SECTION
SH. 11

BORE THRU SILL CONCRETE &
RE-ROUTE 6" CMP

SAWCUT THRU 5 1/2" SPILLWAY SCAB
3' X 5' SECTIONS REMOVE & DISPOSE OFF SITE
BACKFILL WITH SAND & POUR NEW SCAB 5 1/2"
#4 RE-BAR @ 12". IN EXISTING SCAB AT CUT LINE
INSTALL 24" LENGTH OF #4 EPOKIED IN ON 12" OTS
INSTALL A BENTONITE SEAL STRIP ENTIRE LENGTH
OF SAWCUT. CONSTRUCTION JOINTS TO BE SAW
CUT TO MATCH EXISTING.

EXISTING UNDERDRAIN 6" CMP

EDGE OF SPILLWAY

ITEM # 8 DETAIL

SECONDARY SPILLWAY SLAB & WALL NEW MONOLITHIC POUR

